

**ENVIRONMENTAL ASSESSMENT (EA) DETERMINATION FOR THE PROPOSED  
HIGH EXPLOSIVES SYNTHESIS, FORMULATION, AND PRODUCTION (HESFP) FACILITY  
(DOE/EA-1993)**

**Project Name:** High Explosives Synthesis, Formulation, and Production (HESFP) Facility (DOE/EA-1993)

**Location:** The Proposed Action would be located in a new facility at the Pantex Plant

**Brief Description of Proposed Action:**

The HESFP project would consolidate limited legacy facilities that are inadequate for the future mission need and would ensure the required capability and capacity is available to meet future high explosives (HE) workload and mission requirements. Focus areas would include explosive and mock formulation operations to support multiple weapons programs, technology development for future programs, and support for strategic partners. The HESFP Facility would support the Pantex Plant mission through several areas and capabilities.

Currently the National Nuclear Security Administration (NNSA) relies on a single domestic vendor for large-scale synthesis, formulation, and blending for HE products. In the past, the vendor has had failures in production resulting in late deliveries.

The HESFP project includes the following tasks:

**Site Preparation:**

The HESFP Facility would be located in a vacant location within Zone 11 and would be dedicated to specific HE synthesis, formulation, and staging functions with adjacent administrative functions. HE packaging, shipping, and magazine functions would be connected via enclosed ramp structures.

**New Building Design and Construction:**

The HESFP Facility, including the administrative functions, would be approximately 59,000 square feet (ft<sup>2</sup>) and would include necessary platforms for access to process equipment and a mechanical penthouse enclosure for air handling equipment. The packaging, shipping, and magazine spaces would open into a shared circulation area for shipping totaling approximately 10,200 ft<sup>2</sup>. The interconnecting ramp structure would be approximately 4,600 ft<sup>2</sup>. The Blending Building would be a single level with a process equipment platform totaling approximately 2,500 ft<sup>2</sup>.

**Design, Construct, and Operate a New Single Synthesis, Formulation, and Blending Facility:**

The HESFP Facility would support the NNSA mission by increasing capabilities in areas such as polymer-bonded explosive (PBX) formulation, mock HE formulation, extrudable HE formulation, large scale synthesis, particle size modification, large scale blending, packaging, staging, and the design would allow for potential future mission growth.

This document has been reviewed and confirmed to be UNCLASSIFIED and contains no UCNI.

Name: Zelda Martinez

Date: 05/28/2020

CNS eDC/RO ID: 206945

**UNCLASSIFIED**

Based on my review and knowledge of the project, I recommend that an EA be prepared to assess the impacts of the proposed action to construct and HESFP.

**MARY HITSON**

Digitally signed by MARY HITSON

Date: 2020.03.04 15:01:32 -06'00'

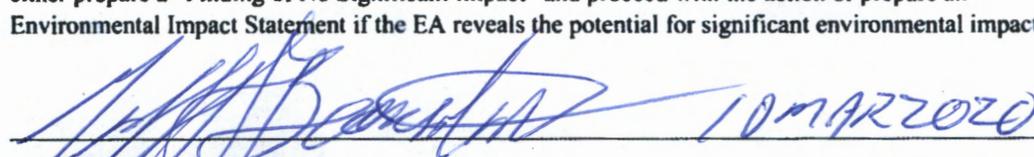
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Mary Helen Hitson, NNSA Production Office (NPO)

Date

National Environmental Policy Act (NEPA) Compliance Officer

Based on the recommendations of the NPO NEPA Compliance Officer, I have determined that an EA be prepared to assess the impacts of the Proposed Action. Based on the analysis in the EA, NPO would either prepare a "Finding of No Significant Impact" and proceed with the action or prepare an Environmental Impact Statement if the EA reveals the potential for significant environmental impacts.



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Geoffrey Beausoleil, Manager, NPO

Date

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